

Listing Of Claims

Summary:

Claims 1-29 (Cancelled)
Claims 35-37 (Cancelled)
Claims 30-34 (Withdrawn)
Claims 38-64 (New)

Claims 1-29 (Cancelled)

30. (Withdrawn) The method of retaining and removing a catheter tube in a patient comprising the steps of:

implanting a catheter having a zone in which the catheter tube and a companion member are stitched together with a longitudinal wire wherein the zone is positioned in the patient and the wire extends to a point outside the patient, said zone retaining the catheter in the patient, and

removing the catheter by accessing a proximal portion of said wire, withdrawing said wire and individually removing the catheter tube and the companion member.

31. (Withdrawn) The method of retaining and removing a multiple tube catheter in a patient comprising the steps of:

implanting a catheter having a zone in which at least two tubes are stitched together with a longitudinal wire wherein the zone is positioned in the patient and the wire extends to a point outside the patient, said zone retaining the catheter in the patient, and

removing the catheter by accessing a proximal portion of said wire, withdrawing said wire and individually removing each of said tubes.

32. (Withdrawn) The method of claim 31 further comprising the steps of:

during said step of implanting the catheter, providing a separating flexible prong proximal of said zone extending from a first one of said tubes into a recess on the second one of said tubes to hold said tubes apart to prevent distal movement of the catheter, and

during said step of removing the catheter, removing said prong from said recess.

33. (Withdrawn) The method of implanting and removing a multiple tube catheter implanted in a patient comprising the steps of:

providing a multiple tube catheter assembly, having first and second tubes and a wire extending longitudinally within the sidewalls of said tubes along a predetermined zone and passing through contacting surfaces of said tubes at said zone to hold said tubes together at said zone, said wire extending proximally within the sidewall of said first one of said tubes to a predetermined proximal position,

implanting said assembly in a patient with said zone within the patient and the proximal ends of said wire extending outside of the patient,

accessing the proximal end of said wire, removing said wire from said catheter to disconnect said tubes at said zone, and

then individually removing each of said multiple tubes from the patient.

34. (Withdrawn) The method of claim 33 wherein: said step of removing comprises pulling on said wire.

Claims 35-37 (Cancelled)

*Eliminated
Species*

Figs. 3+4

38. (New) A catheter assembly comprising:

at least one tube and a longitudinal companion member connected to one another at surfaces thereof along a predetermined zone, and

a linear engagement member, extending longitudinally through at least one of said tube and companion member, and engaging the other one of said tube and companion member at said zone to hold said tube and companion member together at said zone,

said tube, said companion member and said linear engagement member extending proximal of said zone by an amount sufficient to extend out of the body of a patient in whom the catheter is embedded,

withdrawal of said linear engagement member from said zone causing said tube and said companion member to disconnect.

39. (New) The catheter assembly of claim 38 wherein: said linear engagement member extends longitudinally within the sidewall of at least one of said tube and companion member.

40. (New) The catheter assembly of claim 39 wherein: said linear engagement member extends longitudinally within the sidewall of both of said tube and companion member.

41. (New) The catheter assembly of claim 38 further comprising:

a flexible separating prong extending outward from the surface of one of said tube and companion member to abut the surface of the other at a location proximal of said zone to force said tube and companion member to diverge proximal of said zone.

42. (New) The catheter assembly of claim 39 further comprising:

a flexible separating prong extending outward from the surface of one of said tube and companion member to abut the surface of the other at a location proximal of said zone to force said tube and companion member to diverge proximal of said zone.

43 (New) The catheter assembly of claim 40 further comprising:

a flexible separating prong extending outward from the surface of one of said tube and companion member to abut the surface of the other at a location proximal of said zone to force said tube and companion member to diverge proximal of said zone.

44. (New) The catheter assembly of claim 38 wherein: said surfaces at said zone are flat surfaces.

45. (New) The catheter assembly of claim 39 wherein: said surfaces at said zone are flat surfaces.

46. (New) The catheter assembly of claim 40 wherein: said surfaces at said zone are flat surfaces.

47. (New) The catheter assembly of claim 43 wherein: said surfaces at said zone are flat surfaces.

48. (New) The catheter assembly of claim 38
wherein:

said linear engagement member is a set of two
wires extending proximally to a position outside the
patient when the catheter is implanted in a patient,

said wires each having a proximal end, said
wires being withdrawn by pulling on said proximal ends.

49. (New) The catheter assembly of claim 39
wherein:

said linear engagement member is a set of two
wires extending proximally to a position outside the
patient when the catheter is implanted in a patient,

said wires each having a proximal end, said
wires being withdrawn by pulling on said proximal ends.

50. (New) The catheter assembly of claim 40
wherein:

said linear engagement member is a set of two
wires extending proximally to a position outside the
patient when the catheter is implanted in a patient,

said wires each having a proximal end, said
wires being withdrawn by pulling on said proximal ends.

51. (New) The catheter assembly of claim 43
wherein:

said linear engagement member is a set of two
wires extending proximally to a position outside the
patient when the catheter is implanted in a patient,

said wires each having a proximal end, said
wires being withdrawn by pulling on said proximal ends.

52. (New) The catheter assembly of claim 41 further comprising:

a recess on the surface of said tube or companion member against which said prong abuts, said recess engaging the abutting end of said prong.

53. (New) The catheter assembly of claim 42 further comprising:

a recess on the surface of said tube or companion member against which said prong abuts, said recess engaging the abutting end of said prong.

54. (New) The catheter assembly of claim 43 further comprising:

a recess on the surface of said tube or companion member against which said prong abuts, said recess engaging the abutting end of said prong.

55. (New) The catheter assembly of claim 52 wherein: said linear engagement member extends through said prong.

56. (New) The catheter assembly of claim 53 wherein: said linear engagement member extends through said prong.

57. (New) The catheter assembly of claim 54 wherein: said linear engagement member extends through said prong.

58. (New) The catheter assembly of claim 38 wherein: said zone is located on the catheter to be within a patient when the catheter is implanted in a patient.

59. (New) the catheter assembly of claim 40 wherein: said zone is located on the catheter to be within a patient when the catheter is implanted in a patient.

60. (New) The catheter assembly of claim 38 wherein: said linear engagement member is a surgical suture.

61. (New) The catheter assembly of claim 44 wherein: said connected surfaces of said tube and companion member at said zone includes a dove tail coupling between said surfaces, and wherein said wire extends through both sections of said dove tail coupling.

62. (New) The catheter assembly of claim 44 wherein: said connected surfaces of said tube and companion member at said zone include a longitudinal lap joint and wherein said wire extends through adjacent surfaces of said lap joint.

63. (New) The catheter assembly of claim 44 wherein:

a first one of said tube and companion member contains a longitudinal wire having loops at said zones,

a second one of said tube and companion member contains said longitudinally extending wire, said wire engaging said loops when said tubes are assembled, the withdrawal of said wire causing said tubes to become disconnected.

64. (New) A catheter assembly comprising:
at least one tube and a longitudinal companion member connected to one another at surfaces thereof along a predetermined zone,

a wire extending longitudinally through the sidewalls of each of said tube and companion member, and passing through surfaces of said tube and companion member at said zone to hold said tube and companion member together at said tube,

said tube, said companion member and said wire extending proximal of said zone by an amount sufficient to extend out of the body of a patient in whom the catheter is embedded,

said surfaces at said zone being flat surfaces,

withdrawal of said wire from said zone causing said tube and said companion member to disconnect and permit separate non-surgical withdrawal of said tube and said companion member from a patient,

a flexible separating prong extending outward from the surface of one of said tube and companion member to abut the surface of the other at a location proximal of said zone to force said tube and companion member to diverge proximal of said zone, and

a recess on the surface of the other of said tube or companion member against which said prong abuts, said recess engaging the abutting end of said prong.
